

The Northland Sky Watcher

NWS DLH

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*For National Weather Service Weather
Watchers of northeastern Minnesota and
northwestern Wisconsin.*

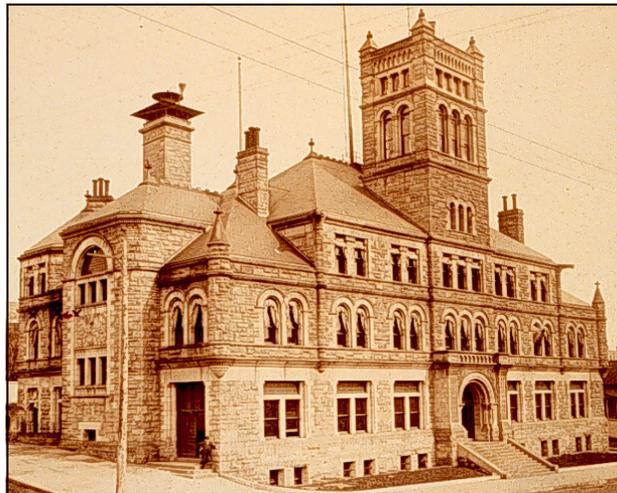
Happy Birthday To Us!



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On February 9th the National Weather Service celebrated its 135th birthday. The NWS was formed by the passage of a joint Congressional Resolution proposed by Congressman Halbert Paine of Milwaukee and signed by President Grant. It was then part of the War Department and named the U.S. Weather Bureau. Duluth was one of the first 24 Weather Bureau stations, staffed by the Army Signal Corps. We would get our current NWS name in 1970 when our agency was put under the jurisdiction of the newly-formed National Oceanic and Atmospheric Administration, or NOAA.



The Old Post Office Building, 5th Ave. W. and 1st St. in Duluth. Home of the Duluth Weather Bureau from 1895 to 1904. Weather instruments and signal flags were on top of the large square tower. This building is no longer standing.

However, the history of the weather business in Duluth goes back as far as 1855, when the U.S. Army Signal Corps began keeping records of Duluth's weather and Lake Superior's ice conditions.



Mr. H. W. Richardson, the Official in Charge of the U. S. Weather Bureau from 1898 to 1931.



- Spring officially begins on March 20th at 6:34 a.m. CST
- Severe Weather Awareness Week is April 18-22.
- Daylight Saving Time begins at 2:00 am Sunday, April 3rd. Put your clocks ahead one hour before retiring Saturday night.





A Skywarn History Lesson



Severe Storm Reporting Handbook from the Weather Bureau, 1956.

Legend has it that Benjamin Franklin was the first storm spotter who would saddle up his horse and ride up nearby hills to get a better look at storms.

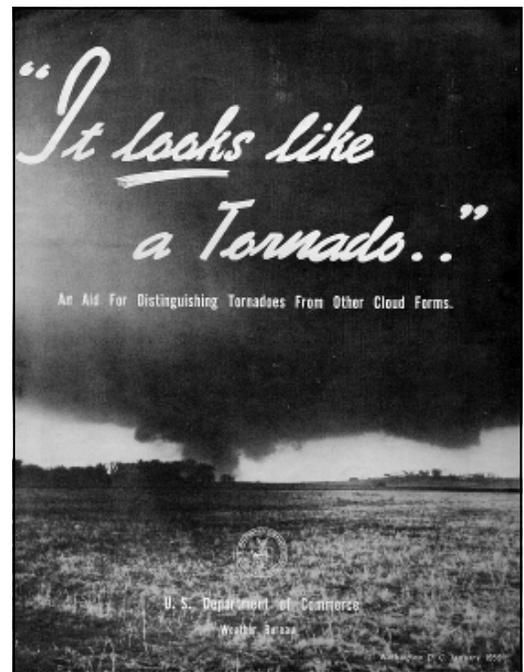
While more official storm spotting had been in existence since the 1940s, mainly for the protection of military installations during World War II, the first training course sponsored by the National Weather Service (then the U. S. Weather Bureau) was on March 8, 1959 in Wellington, KS for 225 storm spotters.

However, it was the Palm Sunday Outbreak of 1965 in which 260 people were killed that was the impetus in forming a multi-agency federal warning system called the Natural Disaster Warning System

(NADWARN). Skywarn was spun-off of NADWARN to create a tornado-specific emergency plan, headed by the National Weather Service.

Since then, the National Weather Service has trained hundreds of thousands of volunteers to watch the Nation's skies. Here in the Northland, we train from 500 to 700 Skywarn Spotters annually and have 1500 spotters.

This document from 1959 stated that it is an "Official Weather Bureau handbook for use by tornado network observers" and included photographs of tornado look-alikes, as well as variations on tornadoes.



eSpotter



Online Weather Reporting System

After 4 months on line, *eSpotter* is a huge success! A big thanks to the over 50 registered NWS *eSpotter* users!

Since last November, some snowfall spotters and cooperative observers have been sending us their weather reports and snowfall amounts right from their computers using *eSpotter*. This online reporting program has been very helpful for the forecasters at the Duluth NWS during this busy winter season. A neat feature of this program is that emergency managers are also able to register and view reports.

For those of you not registered yet, and would like to use *eSpotter* for your winter and summer weather reports, you can register at:

<http://espotter.weather.gov/>



Skywarn Training Schedule



It's time to start thinking about towering cumulus, rotation, funnel clouds, and updrafts. If you can't remember what these words mean, then it's time for a refresher Skywarn training class.

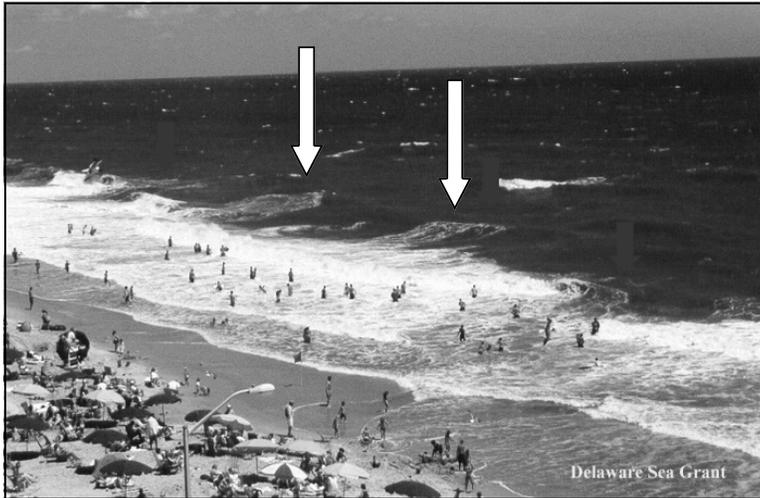
We offer Skywarn Spotter training all across the Northland during March and April. Take a look at the schedule below, or log onto our website www.crh.noaa.gov.dlh, and plan on spending an evening with us. No pre-registration is required. All spotters must be re-trained at least every four years. We promise new and exciting pictures and video, and Dean's corny jokes! More Skywarn classes will be scheduled, so check our website or your local paper often for a class near you!

Date	Time	Location
March 9	6:30 PM	Virginia/Mt. Iron, MN, Nichols Town Hall, 2 blocks north of Hwy 169 on Co. Rd. 102
March 10	6:30 pm	Duluth, MN, Secondary Technical School, next to Central High School
March 17	1:00 PM	Marcell, MN, Family Center, 49103 State Highway 38
March 22	7:00 pm	Banning Junction, MN, Pine County, East Central High School, 61085 State Highway 23
March 24	6:30 PM	Aitkin, MN, City Hall
March 28	6:30 pm	Mellen, WI, Civic Center, Fayette Avenue
March 29	7:00 pm	Spooner, WI, Fire Hall
April 5	6:30 pm	Grand Rapids, MN County Board Room, Courthouse
April 6	7:00 pm	Ashland, WI, Northland College Science Building
April 9	10:00 am	Schroeder, MN, Sugar Loaf Cove , 9096 Highway 61 (4 miles south of Schroeder)
April 13	6:30 pm	Walker, MN, High School
April 14	6:30 pm	Brainerd, MN in basement of County Social Services Building
April 19	2:00 pm	Phillips, WI, Courthouse, County Boardroom,
April 19	6:30 pm	Park Falls, WI, City Hall Boardroom
April 21	7:00 pm	Superior, WI, Government Center, 1316 N. 14th Street
April 25	6:30 pm	International Falls, MN, Rainy River Community College, Science Building, Room 108
April 28	7:00 pm	Hermantown, MN, Public Safety Building
May 12	7:00 pm	Grand Marais, MN, Courthouse, Boardroom



Rip Currents...

Break the Grip of the Rip



Crowded beach with rip currents present. The arrows show the rip currents.

between the beach and the offshore sandbar. Any weakness in the sandbar by the wave action can lead to an evacuation of the excess water, causing a rush of water through the break in the sandbar. People caught in this area can be swept out with the outgoing water. The natural reaction is to try to get back to shore, but this can be nearly impossible. One common misperception is that rip currents are “undertows”. Rip currents do not pull people under – they actually pull them outward. The good news is that you can escape a rip current! Just swim parallel to shore until you are out of the rip current area, and then swim back to shore.

The National Weather Service is working with several agencies, including the U.S. Lifesaving Association, to draw attention to the perils caused by rip currents. Beginning this July 1st, we will mention the potential for rip currents along Lake Superior’s south shore in our daily Hazardous Weather Outlook. Because we don’t know a great deal about our problem areas on western Lake Superior, we will use fairly general criteria during the first year of the program. Essentially, anytime we expect strong on-shore winds of at least 20 mph we will mention the increased likelihood of rip currents. That doesn’t mean that they don’t exist at lesser wind speeds, but they are more likely.

If you’d like to learn more, check out the National Weather Service rip current website at: <http://www.ripcurrents.noaa.gov/>.

- Dean Packingham, Meteorologist

Rip Current Myth

Rip currents do not pull people under water– they pull people away from shore. Drowning deaths occur when people pulled offshore are unable to keep themselves afloat and swim to shore. This may be due to any combination of fear, panic, exhaustion, or lack of swimming skills.

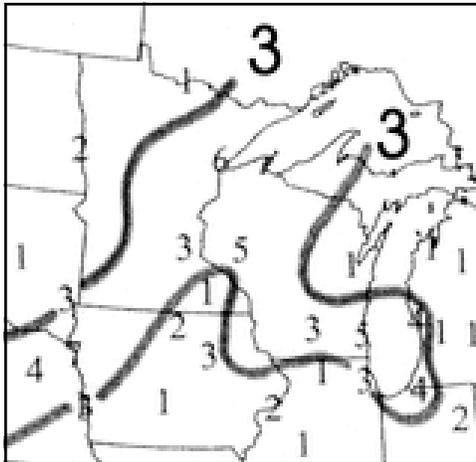


Thunder in the Winter?!



Did you think thunder was only for the summer? Not necessarily! Winter storms can become so strong that lightning develops in the billowing winter storm clouds. The winter version of the thunderstorm is called “thundersnow”. Thundersnow lightning develops the same way as summertime thunderstorms. Ice crystals collide and shatter, and this creates positively and negatively charged particles. The particles gather in groups, especially at the base of the thunderstorm, and feel around toward the ground for a place to strike, usually a tall object with an opposing charge. Hopefully it isn’t you! So remember your lightning safety any time of year!

We ushered in 2005 with a New Year’s day thundersnow storm. For this storm there was such a clash of warm and cold air, and moist and dry air, that the atmosphere responded by generating a very strong winter storm directly over northeastern Minnesota and northwestern Wisconsin. In these situations, the atmosphere typically releases its energy in narrow bands of intense snow. One particular band set up directly over Duluth. Between 7 p.m. and 8 p.m., the National Weather Service in Duluth recorded 3.5 inches of snow, and the following hour they measured another 2.5 inches. The 9.5 inches of snow that fell set a new record snowfall for the day.



*30 year average number of days with thundersnow.
(1961-1990)*

Snowfall totals in the main snow band ranged from 9 to 12 inches, which extended from Duluth to Silver Bay. Areas north of Duluth received 5 to 7 inches of snow. South and east of Duluth, a sleet storm dropped a half inch to one inch of sleet.

Along with the heavy snow came flashes of lightning and rumbles of thunder. It was an incredible sight to see, and generated a swirl of media interest. To learn more about this storm, go to a special section of our website at http://www.crh.noaa.gov/dlh/snowstorm_Jan1_2005.shtml.

Thundersnow is not common and typically occurs in Duluth once every 5 years. Its occurrence drops to once every 10 years the farther you get from Duluth. Below is a map depicting the 30 year average for the occurrence of thundersnow in Minnesota and Wisconsin. So if you find yourself in the midst of a winter time thunderstorm, consider yourself special, and get ready to grab your shovel!

- Ed Shimon, Science and Operations Officer

Weather Funny

Question: What’s the opposite of a warm front?

Answer: A cold back!





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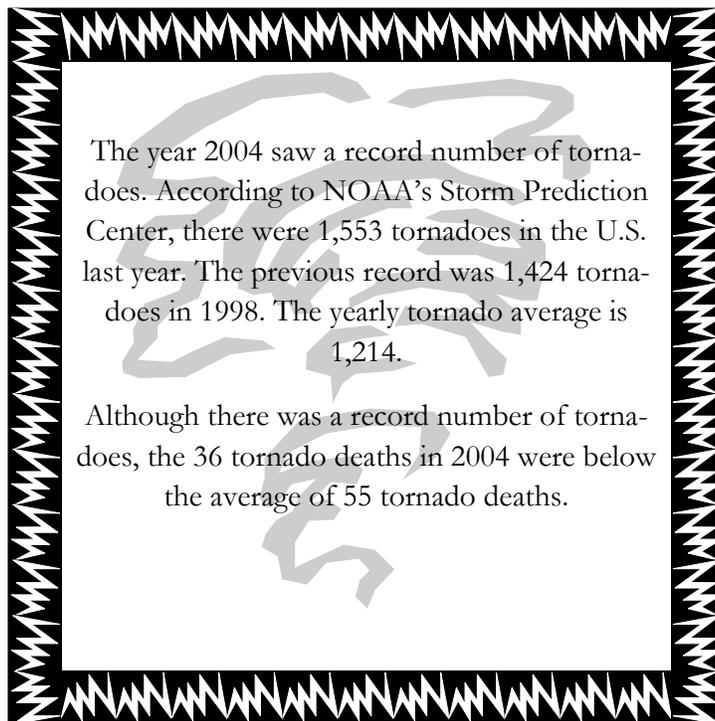
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